

Notice of Allowability

Application No.

10/787,367

Applicant(s)

GRAUPE ET AL.

Examiner

Art Unit

Janet L. Coppins

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the telephone conversation with Applicants' attorney of 10/27/06.
2. ☒ The allowed claim(s) is/are 1-10,12,13 and 15, renumbered as 1-13.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

1. Claims 1-10, 12, 13, and 15 are currently pending in the instant application.

Response to After-Final Amendment

2. Receipt is acknowledged of Applicants' After-Final Amendment, filed August 17, 2006, which has been entered of record in the file. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

3. Accordingly, claims 10 and 12 have been amended.

Claim Rejections - 35 USC § 112

4. Claim 12 previously rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In view of Applicants' amendatory changes, the Examiner withdraws the rejections to the claims.

5. Claim 10 previously rejected under 35 U.S.C., first paragraph, as not being fully enabled. In view of Applicants' amendment and the Examiner's Amendment, see below, the rejection is withdrawn.

EXAMINER'S AMENDMENT

6. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Peter Butch, Reg. No. 32,203, on October 27, 2006.

The application has been amended as follows:

a) Claim 10, line 1, please delete the following diseases: **"AIDS,"** and **"AIDS-related complexes,"** in line 2, **"Alzheimer's disease,"** in lines 3-4, **"breast, ovarian, prostate, lung, bone, throat, brain, testicular, liver, stomach, or pancreatic cancer,"** and in line 10, **"melanoma,"** and **"multiple sclerosis,"**.

Reasons for Allowance

7. Claims 1-10, 12, 13, and 15 are allowable, as newly renumbered claims 1-13. The following is an examiner's statement of reasons for allowance:

This invention relates to novel sulfonamide compounds, their methods of use, and their processes of preparation. The compounds of the instant invention are cysteine protease inhibitors, namely Cathepsin S inhibitors, of Formula I of claim 1. Compounds that selectively inhibit the activity of proteases are known, however the instant claimed compounds according to formula I, wherein the "X³" moiety is piperidine according to Formula (a), are novel and unobvious. The allowable subject matter in this case is limited to compounds, methods of use, and a process for preparing said compounds according to formula I. The closest prior art of record, U.S. 5,672,583 to Chapman et al, teach similar sulfonamide compounds. However, the '583 patent fails to teach or render obvious the same compounds as instantly claimed, their methods of use, and do not fairly suggest their processes of preparation.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue

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fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Telephone Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janet L. Coppins whose telephone number is 571.272.0680. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Joseph K. McKane can be reached on 571.272.0699. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Janet L. Coppins
October 30, 2006

Joseph K. McKane
SPE, Art Unit 1626



GOLAM M. M. SHAMEEM, PH.D
PRIMARY EXAMINER